

MATH310 Groupwork 2022-07-26

NAME:

1. Use induction to prove that for all positive integers n :

$$\sum_{i=1}^n i(i+1) = \frac{n(n+1)(n+2)}{3}$$

Solution:

2. Use induction to prove that for all nonnegative integers n :

$$4 \mid (5^n - 1)$$

Solution: